



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------------|
| 10/606,423 | 06/26/2003 | Giovanni Seni | CML00362H | 6310 |
| 33117 7590 02/05/2008 LEVEQUE INTELLECTUAL PROPERTY LAW, P.C. 221 EAST CHURCH ST. FREDERICK, MD 21701 | | | EXAMINER BODDIE, WILLIAM | |
| | | | ART UNIT 2629 | PAPER NUMBER |
| | | | MAIL DATE 02/05/2008 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/606,423

Applicant(s)

SENI, GIOVANNI

Examiner

William L. Boddie

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In an amendment dated July 2nd 2007 the Applicant amended claims 23-24 and 33. Currently claims 1-19 and 21-38 are pending.

Response to Arguments

2. Applicant's arguments filed November 20th, 2007 have been fully considered but they are not persuasive.

3. On pages 14-15 of the Remarks, the Applicant argues that the Tan reference (referred to as '493 by Applicant) does not teach a display element separate from its touch input screen and only teaches a touch input screen. Applicant continues, arguing that as the Tan reference does not contain a separate display element the motivation to combine the Tan reference with the Demartines ('409 reference) is not understood.

The motivation to combine the two references seems quite clear to the Examiner. As previously stated, the addition of a ink only mode, as taught by Tan, in the Demartines reference will increase the functionality and versatility of the Demartines device. Practical examples could be, for example, the input of a shorthand symbol specific to the user which will not be recognizable to others, perhaps the input of a star next to text to highlight the textual entry, or the input of grammatical symbols. All of these examples could cause problems if submitted for handwriting recognition, Tan teaches how to input and edit this written input.

4. On pages 15-16 of the Remarks, the Applicant argues that Tan does not disclose a mode wherein written input is not processed in a handwriting recognition mode. The

Applicant cites several passages throughout Tan which they claim show that Tan always processes written input in a handwriting recognition mode.

The Examiner must respectfully disagree. The most telling phrase from Tan's disclosure appears in column 7, lines 9-10, stating that the user "changes back to the handwriting recognition mode." This phrase alone requires that the user can input handwriting while not in a recognition mode.

As shown above, the rejections are seen as sufficient and are thus maintained.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 29-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Applicants are directed to page 53 of the Interim Statutory 101 Guidelines, which states; "computer programs claimed as computer listings per se i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed."

7. As Applicant has failed to provide a specific definition in the specification for the claimed "computer usable medium", it would appear to be reasonable to interpret the claimed "computer usable medium" as fairly conveying signals and other forms of propagation or transmission media to one of ordinary skill in the art.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-14, 16-19, 21-22 and 24-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demartines et al. (US 6,661,409) in view of Tan et al. (US 5,917,493).

With respect to claim 1, Demartines discloses, an electronic device for written input and subsequent display of said written input, the electronic device (fig. 1) comprising:

a touch input screen (104 in fig. 1), said touch input screen operable to accept written input (col. 3, lines 43-47);

a display element (105 in fig. 1), said display element operable to display recognized text in a text recognition mode (col. 6, lines 12-14, for example), wherein the recognized text is determined from the written input using a recognition feature coupled to the touch input screen (col. 3, lines 22-28); and

a scrolling mechanism coupled to the touch input screen that enables at least a portion of the touch input screen (104 in fig. 1) to appear to move as written entries are input thereon so as to continuously present screen space on the touch input screen to the user for written input (col. 4, lines 1-6).

Demartines does not expressly disclose, displaying digital ink that corresponds to the written input provided to the touch input screen in an ink only mode, nor where the digital ink may be edited by the user.

Tan discloses, an electronic device for written input and subsequent display of said written input, the electronic device (fig. 1) comprising:

a touch input screen and display (109 in fig. 3), said display operable to display recognized text in a text recognition mode (WRITE mode; col. 5, lines 38-41) and digital ink that corresponds to the written input provided to the touch input screen in an ink only mode (DRAW INK mode; col. 5, lines 28-35), wherein the recognized text is determined from the written input using a recognition feature coupled to the touch input screen (col. 5, line 40) and wherein the digital ink may be edited by the user (SELECT INK mode; col. 5, lines 29-32).

Demartines and Tan are analogous art because they are both from the same field of endeavor namely handwriting recognition touch input screens.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the additional DRAW INK mode of Tan in the device of Demartines.

The motivation for doing so would have been the additional versatility and functionality of such a device that includes a DRAW INK mode (Tan; col. 1, lines 60-64).

With respect to claim 2, Demartines and Tan disclose, the electronic device of claim 1 (see above).

Demartines further discloses, wherein the screen is of a predetermined size (clear from fig. 1) and the screen portion (104) is smaller than the predetermined screen size (104 + 105) so that only the screen portion appears to move during written input (clear from figs. 1).

With respect to claim 3, Demartines and Tan disclose, the electronic device of claim 1 (see above).

Demartines further discloses wherein the screen has an input area including the screen portion on which written input is entered and displayed (104 in fig. 1) and an output area separate from the input area on which one or more of corresponding digital ink and recognized text is displayed (105 in fig. 1).

With respect to claim 4, Demartines discloses, a handwritten input user interface (HIUI) (col. 2, line 50) for a portable device having a touch-enabled input screen with a predetermined area thereof (fig. 1), said HIUI comprising:

- a handwriting input area (104 in fig. 1) residing in a predetermined portion of a touch-enabled input screen (104 + 105), handwritten text being entered using a stylus (col. 3, lines 20-21);

- an input/display scrolling window in said handwriting input area, written entries being scrolled such that writing space is continuously available within said handwriting input area (col. 4, lines 1-6); and

- a display area operable to display recognized text in a text recognition mode (col. 3, lines 53- 56).

Demartines does not expressly disclose, that the handwritten input entered in the handwriting input area is displayed without the requirement of converting said handwritten input to text using a recognition element.

Tan discloses, a handwritten input user interface (fig. 3) comprising:

a display area (109 in fig. 3) operable to display recognized text in a text recognition mode (WRITE mode; col. 5, lines 38-41) and handwritten input as digital ink, corresponding to the handwritten input entered in the handwriting input area without the requirement of converting said handwritten input to text using a recognition element (col. 5, lines 38-41), in an ink only mode (DRAW INK mode; col. 5, lines 28-35).

Tan discloses, an electronic device for written input and subsequent display of said written input, the electronic device (fig. 1) comprising:

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the additional DRAW INK mode of Tan in the device of Demartines.

The motivation for doing so would have been the additional versatility and functionality of such a device that includes a DRAW INK mode (Tan; col. 1, lines 60-64).

With respect to claim 5, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

Demartines further discloses, wherein said handwritten input area includes a word separation line (120 in fig. 1) and spans said touch-enabled screen's width (claim 8).

With respect to claim 6, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

Demartines further discloses, including a recognition engine (col. 3, lines 22-25) for recognizing individual words of the handwritten text, said recognized word operable to be displayed in the display area (col. 3, lines 25-29).

With respect to claim 7, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

Demartines further discloses, wherein stylus entries made in said handwritten inputs are text entries (clear from 104 in fig. 1) and stylus entries made outside of said handwritten input area are pointer function entries (claim 13).

With respect to claim 8, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

Demartines further discloses, further comprising one or more action icons (106-114 in fig. 1) on said touch-enabled screen displayed together on a side of said touch-enabled screen.

With respect to claim 9, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

Demartines further discloses, wherein a word separator is displayed in said handwritten input are to the right of words being entered (120 in fig. 1), entries to the right of said word separator indicating a start of a next word (col. 3, lines 57-67).

With respect to claim 10, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

Demartines further discloses, wherein the handwritten input area is operable to display a menu of possible functions to the user (128 in fig. 2), said menu comprising one or more of:

- sending digital ink of the display area electronically to a remote destination;
- printing digital ink of the display area;

erasing the digital ink from the display area;
viewing the digital ink of the display area at a greater or lesser degree of resolution; and
applying a recognition engine to at least a portion of the digital ink of the display area (col. 4, line 64 – col. 5, line 26).

With respect to claim 11, Demartines and Tan disclose, a HIUI as in claim 10 (see above).

Demartines further discloses, comprising one or more of:
an undo button, said undo button operable to undo one or more actions performed within the display area;
a menu button, wherein a display of the menu may be toggled using the menu button of the portable device;
a keyboard button, said keyboard button operable to display a keyboard having alphanumeric or non-Western character data in the handwritten input area;
a spacebar button, said spacebar button usable to insert a space in the display area;
a backspace button (col. 5, lines 66-67), said backspace button usable to remove a portion of digital ink of the display area;
a new line button, said new line button usable to insert a new line at the user specified location of the display area.

With respect to claims 12 and 13, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

While neither Demartines nor Tan expressly disclose offering display of digital ink in a variety of colors and sizes these limitations are seen as simple design choices that are quite obvious in the art. As such they are not seen as patentably distinguishing over the state of the art at the time of the invention.

With respect to claim 14, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

Demartines, when combined with Tan, discloses, wherein the digital ink entered by the user is displayable using multiple ink line thicknesses (col. 5, lines 65-66).

With respect to claim 16, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

Demartines further discloses, wherein the user can control the rate of scrolling (col. 5, lines 63-64).

With respect to claim 17, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

Demartines further discloses, wherein the user can control a duration of a pen timeout (col. 5, lines 60-63).

With respect to claim 18, Demartines discloses, a personal digital assistant (PDA) (fig. 1) capable of displaying words in a continuous handwritten text stream, said PDA comprising:

a touch-enabled input screen (104, 105 in fig. 1);

a communications port for communicating with a remotely connected computer, data being transferred between said remotely connected computer and said PDA (col. 4, lines 20-22; also see claim 16);

a local storage storing applications to be run on said PDA (col. 3, lines 5-8);

a plurality of switches providing manual input to said PDA (col. 4, lines 22-24);

a handwritten input user interface (HIUI) comprising:

a designated handwriting input area residing in a lower portion of said touch-enable input screen (104 in fig. 1), handwritten words entered using a stylus or other functionally similar input device (col. 3; lines 19-22);

an automatically scrollable output area (104 in fig. 1), said handwriting input are being super-imposed on said scrollable output area (clear from fig. 1), said scrollable output area displaying digital ink strokes corresponding to stylus entries made in said designated handwriting input are, said scrollable output area scrolling continuously at a rate set by stroke rate (col. 2, lines 54-64);

a text output area (105 in fig. 1) operable to display the digital ink strokes corresponding to stylus entries made; and

one or more action icons displayed together on a side of said touch-enabled screen and providing access to editing functions for editing previously displayed words (106-114 in fig. 1).

Demartines does not expressly disclose, that the handwritten input entered in the handwriting input area is displayed without the requirement of converting said handwritten input to text using a recognition element.

Tan discloses, a handwritten input user interface (fig. 3) comprising:
a display area (109 in fig. 3) operable to display recognized text in a text recognition mode (WRITE mode; col. 5, lines 38-41) and handwritten input as digital ink, corresponding to the handwritten input entered in the handwriting input area without the requirement of converting said handwritten input to text using a recognition element (col. 5, lines 38-41), in an ink only mode (DRAW INK mode; col. 5, lines 28-35).

Tan discloses, an electronic device for written input and subsequent display of said written input, the electronic device (fig. 1) comprising:

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the additional DRAW INK mode of Tan in the device of Demartines.

The motivation for doing so would have been the additional versatility and functionality of such a device that includes a DRAW INK mode (Tan; col. 1, lines 60-64).

With respect to claim 19, Demartines discloses, a method of providing written input to an electronic device (figs. 3-4), said method comprising:

- .receiving an entry from a written-entry screen area (152 in fig. 4);
- displaying a corresponding digital ink stroke in said written-entry screen area (154 in fig. 4);
- shifting each displayed digital ink stroke horizontally at a rate corresponding to an ink stroke rate of the digital ink, whereby written entries appears to be scrolling off one side of a display as on ticker tape (156-158 in fig. 4); and
- displaying the written entries in a display area (164 in fig. 4), wherein displaying the written entries in the display area further comprises:

passing said received entry to a handwriting recognition engine, said handwriting recognition engine converting said received entry to text (162 in fig. 4), and displaying text in a textual display area (105 in fig. 1a) in a text recognition mode (col. 3, lines 25-28).

Demartines does not expressly disclose, converting the written entries to digital ink and displaying the digital ink in the textual display area in an ink only mode.

Tan discloses, an electronic device for written input and subsequent display of said written input, the electronic device (fig. 1) comprising:

a touch input screen and display (109 in fig. 3), said display operable to display recognized text in a text recognition mode (WRITE mode; col. 5, lines 38-41) and converting the written entries to digital ink and displaying the digital ink in the textual display area in an ink only mode (DRAW INK mode; col. 5, lines 28-35).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the additional DRAW INK mode of Tan in the device of Demartines.

The motivation for doing so would have been the additional versatility and functionality of such a device that includes a DRAW INK mode (Tan; col. 1, lines 60-64).

With respect to claim 21, Demartines and Tan disclose, a method as in claim 19 (see above).

Demartines further discloses, wherein the shifting displayed digital ink strokes includes displaying a word separator indicating a point on the written entry screen area designating demarcation between continuation of a current word and initiation of a next word (col. 3, lines 57-67).

With respect to claim 22, Demartines and Tan disclose, a method as in claim 21 (see above).

Demartines further discloses, wherein said word separator scrolls with a written entry when written input is determined to have paused (col. 4, lines 7-9).

With respect to claim 24, Demartines and Tan disclose, a method as in claim 19 (see above).

Demartines further discloses, wherein the user can edit handwriting in the display area, further comprising one or more of:

- deleting one or more portions of ink traces of the digital ink;
- inserting one or more spaces between ink traces of the digital ink;
- removing one or more spaces between ink traces of the digital ink; and
- inserting one or more new lines within ink traces of the digital ink (note the new line tool, 108 in fig. 1).

With respect to claims 25-27, as these claims further limit events that were not explicitly required by the parent claim they are rejected here on the same merits as the parent claim 24.

With respect to claim 28, Demartines and Tan disclose, a HIUI as in claim 19 (see above).

Demartines further discloses, wherein the user can draw without having the input area scroll, comprising:

- user entering a pause mode by pressing a user interface button (scrolling animation object), said pause mode is operable to prevent input screen from scrolling;

user drawing within input screen; and
user exiting pause mode whereby what was drawn is placed in the display area
(col. 6, lines 14-16).

With respect to claim 29, Demartines discloses, a computer program product for inputting written entries into a computer (col. 5, lines 27-31), said computer program product comprising a computer usable medium having computer readable program code thereon, said computer readable program code comprising:

computer readable program code means for continuously receiving written entries (col. 3, lines 29-32);

computer readable program code means for converting said written entry into digital ink (col. 3, lines 53-56);

computer readable program code means for setting a scrolling speed responsive to an entry input rate (col. 3, lines 25-29);

computer readable program code means for displaying newly entered said digital ink and removing previously displayed written input from an input display at a rate set by said controlling speed, displayed said written input appearing as if on a ticker tape (col. 3, lines 15-39); and

computer readable program code means for displaying current and previous written input in an output display element (col. 3, lines 25-27).

Demartines does not expressly disclose, that the handwritten input entered in the handwriting input area is displayed without the requirement of converting said handwritten input to text using a recognition element.

Tan discloses, a handwritten input user interface (fig. 3) comprising:

a display area (109 in fig. 3) operable to display recognized text in a text recognition mode (WRITE mode; col. 5, lines 38-41) and handwritten input as digital ink, corresponding to the handwritten input entered in the handwriting input area without the requirement of converting said handwritten input to text using a recognition element (col. 5, lines 38-41), in an ink only mode (DRAW INK mode; col. 5, lines 28-35).

Tan discloses, an electronic device for written input and subsequent display of said written input, the electronic device (fig. 1) comprising:

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the additional DRAW INK mode of Tan in the device of Demartines.

The motivation for doing so would have been the additional versatility and functionality of such a device that includes a DRAW INK mode (Tan; col. 1, lines 60-64).

With respect to claim 30, Demartines and Tan disclose, a computer program product for inputting written entries into a computer as in claim 29 (see above).

Demartines further discloses, comprising:

computer readable program code means for identifying individual words and calling handwriting recognition (col. 4, lines 31-45); and

computer readable program code means for recognizing written words and providing recognized said words to the output display element (col. 3, lines 42-47).

With respect to claim 31, Demartines and Tan disclose, a computer program product for inputting written entries into a computer as in claim 29 (see above).

Demartines further discloses, wherein the computer readable program code means for receiving written entries further comprises:

computer readable program code means for determining whether said written entries are being made in an input area of a touch sensitive screen or in an other area of said touch sensitive screen than said input area (col. 5, lines 43-46); and

computer readable program code means for providing commands responsive to entries in said other area, entries in said input area being received as written entries (note the file menu in fig. 1).

With respect to claim 32, Demartines discloses, an electronic device for handwritten input and subsequent display of said handwritten input (fig. 1), the electronic device functionally comprising:

a user interface having an ink text canvas (105 in fig. 1) and a conveyor canvas (104 in fig. 1);

one or more ink text areas coupled to the ink text canvas (note the words displayed in 105 in fig. 1);

a conveyor area, coupled to the one or more ink text areas and coupled to the user interface (col. 3, lines 15-39; discloses the connection amongst the input text and the displayed text), said conveyor area comprising one or more ink traces (note the written words in 104 in fig. 1);

an event loop of the user interface (fig. 3), the event loop operable to respond to:

pen down events (134 in fig. 3);

pen up events (142 in fig. 3);

pen move events (col. 5, lines 35-37); and
pen timeout events (col. 6, lines 8-10),
wherein upon an occurrence of a pen timeout event in a text recognition mode (146 in fig. 3), one or more ink traces are sent to the ink processor for display after converting said one or more ink traces to text using a recognition element (col. 5, lines 40-43).

Demartines does not expressly disclose, an ink only mode, wherein ink traces are sent to the ink processor for display without converting said one or more ink traces to text using a recognition element.

Tan discloses, an electronic device for written input and subsequent display of said written input, the electronic device (fig. 1) comprising:

a touch input screen and display (109 in fig. 3), said display operable to display recognized text in a text recognition mode (WRITE mode; col. 5, lines 38-41) and converting written entries to digital ink and displaying the digital ink in the textual display area in an ink only mode without using a recognition element (DRAW INK mode; col. 5, lines 28-35).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the additional DRAW INK mode of Tan in the device of Demartines.

The motivation for doing so would have been the additional versatility and functionality of such a device that includes a DRAW INK mode (Tan; col. 1, lines 60-64).

With respect to claim 33, Demartines and Tan disclose, the electronic device of claim 32 (see above).

Demartines further discloses, wherein upon an occurrence of a pen down event:

if a trace is already present and the trace has substantially fallen off an edge of the conveyor area ("if a pause is long enough"; col. 5, line 40), then send the trace to the ink text canvas for display (col. 5, line 43), delete the trace from the conveyor area, ensure scrolling, cancel any pending timeout events, and add an ink point to the conveyor area (fig. 3; col. 5, lines 35-38);

if a trace is already present and the trace is not falling off an edge of the conveyor area, then ensure scrolling cancel any pending timeout events, and add an ink point to the conveyor area (col. 5, lines 50-54);

if a trace is not present, then ensure scrolling, cancel any pending timeout events, and add an ink point to the conveyor area (fig. 3, col. 5, lines 34-35).

With respect to claim 34, Demartines and Tan disclose, the electronic device of claim 32 (see above).

Demartines further discloses, wherein upon an occurrence of a pen move event, an ink point is added to a current ink trace of one or more ink traces (col. 5, lines 35-37).

With respect to claim 35, Demartines and Tan disclose, the electronic device of claim 32 (see above).

Demartines further discloses, wherein upon occurrence of a pen up event an ink point is added to a current ink trace of one or more ink traces and a pen up timeout event is scheduled (144 in fig. 3; col. 5, lines 38-40).

With respect to claim 36, Demartines and Tan disclose, the electronic device of claim 32 (see above).

Demartines further discloses, wherein upon an occurrence of a pen timeout event, any pending timeouts are canceled, one or more ink traces are sent to the ink processor for display, the one or more ink traces are deleted from the conveyor area, and scrolling of conveyor area is stopped (clear from fig. 3; col. 5, lines 43-54).

With respect to claims 37 and 38, Demartines and Tan disclose, the electronic device of claim 36 (see above).

Demartines further discloses wherein the ink processor displays the one or more ink traces in the ink text canvas (105 in fig. 1), after scaling and segmenting the written input into lines so that it can be displayed vertically in the ink text canvas (scaling and segmenting is clear from figs. 1a/b; note that "words" is placed on the next line in 105 while it was written normally in 104).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Demartines et al. (US 6,661,409) in view of Tan et al. (US 5,917,493) and further in view of Haneda et al. (US 5,698,822).

With respect to claim 15, Demartines and Tan disclose, a HIUI as in claim 4 (see above).

Neither Demartines nor Tan expressly disclose, wherein the user can place a cursor for digital ink modification in the display area.

Haneda discloses, wherein the user can place a cursor for digital ink modification in the display area (fig. 42, col. 1, lines 65-66; for example).

Tan, Demartines and Haneda are all analogous art because they are all from the same field of endeavor namely, handwriting recognition touch screen devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to allow for user defined cursor editing of the digital ink of Tan and Demartines as taught by Haneda.

The motivation for doing so would have been to allow the user to edit previously entered digital ink as well as to clearly illustrate the position of input/display.

10. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Demartines et al. (US 6,661,409) in view of Tan et al. (US 5,917,493) and further in view of Kuriyama et al. (US 5,838,302).

With respect to claim 23, Demartines and Tan disclose, a method as in claim 19 (see above).

Neither Tan or Demartines expressly disclose, wherein the user can insert print characters within the digital ink of the display are further comprising activating a keyboard from a menu, said keyboard operable to be used to enter alpha-numeric characters intermingled with the digital ink.

Kuriyama discloses, the activating of a keyboard in a touch screen device to insert alpha-numeric characters (note the keyboard in fig. 3a; intermingled in fig. 3d).

Tan, Demartines and Kuriyama are all analogous art because they are all from the same field of endeavor namely, handwriting recognition touch screen devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to allow the user to activate a keyboard to input alpha-numeric characters, taught by Kuriyama, into the device of Demartines and Tan.

The motivation for doing so would have been to allow word input without being concerned with handwriting legibility.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

1/28/08
wlb


SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER